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SELECT CASES

OF THE

DISORDER

COMMONLY TERMED

THE PARALYSIS OF THE LOWER
EXTREMITIES.

family history of Angina
By JOHN JEBB, M.D. F.R.S.

L O N D O N :

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BY JOHN JERRARD, F.R.S.

LONDON:

WILLIAM JOHNSON, 10, ST. MARK'S LANE, E.C. 4.

DEDICATION.

permeated of conveying them. Per-
mit me to testify my sense of obli-
gation, by inscribing the following
pages to your respected name.

PERCIVALL POTT, Esq. F.R.S.

**SENIOR SURGEON OF ST. BARTHOLOMEW'S
HOSPITAL.**

S I R,

AT an early period of my
medical studies, you pointed
out the path to substantial science;
and your subsequent instructions
gratified that desire of know-
ledge, which your exhortations had
excited: favours enhanced by the
manner

DEDICATION.

manner of conferring them. Permit me to testify my sense of obligation, by inscribing the following pages to your respected name.

I remain

Your obedient and

Obliged servant,

JOHN JEBB.

Craven-Street, Sept. 7, 1782.

SELECT CASES, &c.

MR. POTT, in his tracts upon the Paralysis of the lower extremities, having described the symptoms of that disorder, together with the appearances upon dissection, with his usual perspicuity and precision; having also recommended a mode of treatment, of which experience hath very fully demonstrated the success; it may perhaps appear an act of unjustifiable presumption to solicit the further attention of the public to a subject, commented upon by his masterly pen, and therefore, it may be urged, already exhausted.

Every person, who with a proper degree of attention peruses the publications of that able writer, must observe, that the doctrines advanced in his treatises upon the Injuries of the Head, the Hydrocele, and Ruptures, although they are laid down with a degree of clearness and accuracy, of which we have but few examples, receive considerable light from the cases he has subjoined. In the medical art, general propositions are rendered more intelligible by a representation of the particular instances from which they were deduced. The doctrines advanced are impressed more forcibly on the understanding, while the circumstances of the case not unfrequently suggest reflections, that gratify the activity of our minds, and enable us to form deductions for ourselves.

It has frequently occurred to me, that much light and information might be derived to students in medicine, were the physicians

physicians of our hospitals more generally to imitate the manner pursued in the Infirmary of Edinburgh. Were they to point out to their pupils such particular cases, as seemed most likely to afford opportunities of improvement—were they to encourage them to meet and to report the result of their enquiries into the symptoms of the disorder, the effect of the medicines, and the progress of the complaint to its fatal termination, or its cure—were they, lastly, from the various accounts of the students, and their own observations, to draw up regular and well-digested histories of such cases, as might appear most deserving of attention, and insert them, properly authenticated, in the books of the hospital, such histories and details would be attended with public as well as private advantage; they would be analagous to the reports and year-books of our lawyers—to the recorded observations of the appearances in the heavens—

and might be resorted to as authorities, and as evidences of Nature's powers, and of Nature's laws.

Instances frequently occur in hospitals, where, without offence and without difficulty, enquiries might be made into the original causes and origin of the disorder, by an examination of the appearances in the body after death. This is at present sometimes permitted, under proper restrictions; but the mode of conducting such enquiry admits of considerable improvement: the investigation should be more minute, and instituted under the immediate inspection of the attendant physician, assisted by a person accustomed to morbid dissections, and a proficient in the anatomical art. The appearances, submitted to the view of all the students, and accurately reported, should be properly authenticated; and if inserted in the opposite page to the history of the symptoms and the mode of treat-

treatment, would conduce more, than upon the first reflection can be conceived, to the establishment of the art of medicine upon a solid, because truly philosophical, foundation.

The cases, now offered to the public, are not proposed, in any respect, as models of the plan I would recommend; they are transcribed from note-books, wherein the symptoms and appearances were set down without any further view than my own private reflection and improvement: nor have I the presumption to imagine that it is in my power to suggest any new ideas upon the present subject. However, as the cases subjoined were taken with fidelity and care, as some of them were under the immediate management of Mr. Pott, when he composed his treatises, the relation of them may possibly tend to confirm his theory, and explain the reasons of his practice.

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In conformity to the principles upon which the inimitable Nosology of Dr. Cullen is founded, I will, in the history of these cases, confine myself solely to evident symptoms, and the patient's narrative; being fully satisfied, that to describe disorders according to the forms in which they really evidence themselves to the senses, with a careful attention to the patient's feelings, is the most likely method of acquiring both a knowledge of their causes and of their cure.

C A S E I.

T. C. aged thirty-two, originally of an healthy constitution, was admitted a patient in St. Bartholomew's Hospital in November, 1777. He sometimes complained of a pain, but generally of a numbness, at the margin of the thorax, under the cartilages of the ninth and tenth ribs
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of the left side, with a cough, spitting, and shortened respiration, when he lay on that side; the spinous process of the seventh or eighth dorsal vertebra was considerably protuberant; his belly was prominent and flaccid, with a numbness extending itself over the whole abdomen, and great debility of the muscoli obliqui and transversales, whenever he voluntarily attempted to contract them; a sensation of chillness prevailed in his knees, with a want of feeling in the fore part of his legs, and an inability of drawing them up in bed.

To these symptoms were added twitchings in the flexors of his legs, and numbness of the feet, a jarring sensation in the Tendo Achillis of one foot, and transient pains in both, which, with the chillness, proceeded, as he conceived, and repeatedly declared, not from the protuberant part of the spine, but the lumbar vertebra immediately above the os sacrum.

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The quickness of the pulse, the florid appearance of his countenance, and state of respiration, strongly suggested the idea of hectic fever prevailing in the system.

These affections, with a numbness of the sphincter ani, costiveness, and a want of consciousness when his faeces were ejected, completed the catalogue of his complaints.

Upon repeated enquiries, he constantly declared, that he did not recollect any strain, or other accident, to which he could ascribe his present sufferings.

It appeared that it was nearly three years since his disorder commenced. His first complaint was a rheumatic affection in the side, which was cured by Gum Guaiacum. About this period he imagined he got cold, a pain and soreness in the small of his back succeeding to that complaint, and a sense of inward weakness in his

his breast. These symptoms were exasperated by a cough, numbness of the abdomen followed next in order, with a gradual accession of the other symptoms, until he was confined to his bed.

Before the application of the caustics he had made trial of the cold-bath, mercurial frictions, tinctura sacra, volatile liniment, a strengthening plaister to the loins, and the screw-chair, without any good effect whatever. The cold-bath and screw-chair were evidently hurtful.

The caustics being applied, according to Mr. Pott's directions, on each side of the protuberance, soon produced a sensible effect; the twitchings in his thighs and legs were increased, and in some degree sensation and voluntary motion were restored in his feet; but the advances to a perfect cure were not very rapid during the first six months.

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He next recovered the power of expelling flatus per anum: during this period the curvature appeared to diminish: the numbness in his insteps remained for many months, but at length, all his complaints wore off, his former state of health returned, and he intirely recovered his former vigour.

CASE II.

R. B. aged twenty-one, was admitted into St. Bartholomew's Hospital in June, 1778. A protuberance being observed in the spine, the caustics were applied in the course of the following month. At that time, he lay totally deprived of the use of his lower extremities, which were rigid, and almost intirely insensible, an imperfect feeling remaining only in the plantæ pedum and the knees. Transitory twitchings

twitchings and tremblings prevailed at times, with general rigors, as in the cold fit of an ague; his fæces came away without his knowledge, his urine flowed without his consent, a violent pain in his bowels preceding its evacuation. He was also affected with numbness below the navel. He complained at times of a pain in his side, with spittings, and a constant uneasiness under the sternum.

His strength at this time was much wasted, in consequence of two large fores on his hips of more than eight inches diameter, accompanied with exfoliations of the great trochanters. A symptom somewhat singular was observed in his case. For about a month before the date of his admission, he was affected with a convulsive motion in the second finger of one of his hands.

From his account of the origin and progress of the disorder, I collected as follows:

About two years before his admission into the hospital, he fell from a hay-loft; his loins received the force of the fall; he recovered himself in a few minutes; and for three months felt no kind of complaint.

At the close of this period he began to be sensible of a pain in the eighth or ninth dorsal vertebra, the spinous process of which became soon after protuberant; the pain was apparently of the rheumatic kind, being worse when he was warm in bed, and recurring after having caught cold. At this time he also found his ability in raising heavy bodies diminished, and his powers of motion impeded.

In a year and an half after the accident, his pain increasing, in consequence, as he thought, of a cold, he applied to a surgeon for advice, who ordered an embrocation for his back. In a few days afterwards he felt a pain descending from the protuberant vertebra, in the course of the spine, and of the ischiatic and the crural nerves, affecting the thigh, the ham, and the gastrocnemii muscles to his heel. This pain soon vanished, and never afterwards returned; the weakness and the numbness rapidly increased after this sensation, until, in the course of four days, he was reduced to the helpless situation in which I found him.

He continued in this weak state for many months, his pulse beating generally 140, and at one time 180 strokes in a minute. The issues evidently produced some effect: at times there was a transient recurrency of sensation in his
knees
feet;

feet; but nature being exhausted by the discharge from his ulcerated hips; his general health being also impaired from inward disease, he gradually sunk under his complaint.

I much regretted, that an opportunity was not allowed by his friends of examining into the state of the parts.

C A S E III.

R. H. aged nineteen, was admitted into St. Bartholomew's Hospital in December, 1777.

At the time of his admission he complained of pain in the muscles of his thighs, and the fore part of his legs, which sensibly grew worse at night. His knees

knees and ankles were extremely feeble. He walked with great difficulty and pain, but had never been affected with the usual symptoms of numbness or chillness in his lower extremities, during any period of his disorder. He felt a soreness under the short ribs of both sides, which was much exasperated by a troublesome cough. From the parts thus affected, lancinating pains frequently proceeded down his thighs, which more particularly distressed him when he lay on his belly: his pulse was tolerably strong, but very irregular. He was also much emaciated: a white and viscid mucus was frequently expectorated, particularly in a morning; his general debility continually increased.

The spinous process of the ninth or tenth dorsal vertebra was very protuberant; but he conceived the pain and weakness

weakness to proceed from a point considerably below that protuberance.

Upon my examination into the cause and progress of his complaints, he informed me that they were the consequence of a strain received, about a year before his admission, from his foot slipping while he was ascending a ladder with a sack of oats: he felt a sudden shock affect the part which became afterwards protuberant; he perceived no immediate inconvenience, but proceeded in his business as before.

About two months after the accident, having been exposed through the whole of an inclement night to the cold, he was taken with a shivering, and felt a rheumatic pain suddenly seize the part first affected by the shock; a second fit of shivering, with pains at the bottom of his

belly, took place within six weeks after the first; the protuberance now became apparent, and gradually increased, with debility and the symptoms already described.

Within a month after the application of the caustics, he grew evidently better; his pains grew less troublesome, his strength gradually increased, until, at the close of about seven months, he was dismissed, perfectly free from all complaint.

C A S E IV.

R. S. aged ten years. He received a blow on the pit of the stomach, about twelve months before the application of the caustics. He fell in consequence of the stroke, but recovered himself in a

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few minutes, and felt no inconvenience for some days. About a week after the accident, he began to be sensible of weakness in his limbs: at the close of the following fortnight, the spinous process of the second dorsal vertebra became a little protuberant; and in three weeks more, his complaints had increased with so much rapidity, that the use of his lower extremities was entirely lost, and all sensation in them totally extinct: they were also rigid, the feet being pointed downwards, as if the gastrocnemii muscles were in a state of spasm. He had been under the care of Dr. Pitcairn for above nine months, who attended to his case with singular humanity; but having prescribed various medicines and applications, without the wished-for success, at length he recommended him to the care of Mr. Pott. When the caustics were ordered, the disease occupied five or six

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of the vertebræ of the back, which was bent into an uniform curve: the patient's chin rested on his breast; and the appearance was so unpromising, that Mr. Pott declared, he was induced to make trial of the caustics, merely because he would leave nothing undone in a case so truly deplorable, but that he scarcely could expect any advantage from their use.

In about a month from the time of application of the caustics, he acquired the power of moving the great toe of one of his feet; he was exhorted to attempt the motion of the other, by exerting repeated acts of volition, which in a little time he also accomplished. I was particularly attentive to the progress of the cure for many months. The pointed position of his feet long remained. However, without the use of any medicine, the power of motion of the ankle-joint was at length regained. The curvature

of his back gradually decreased; and at the close of about ten months from the time of applying the caustics, having recovered the intire use and vigour of his limbs, he was discharged in perfect health.

C A S E V.

J. R. admitted a patient in St. Bartholomew's Hospital, in May, 1779. He informed me, that four years before this period, his left side was hurt, in consequence of a fall from an horse: that he was not blooded immediately upon the accident; but feeling a pain there three months afterwards, he then was blooded, and the pain thereby for a time intirely removed.

In about half a year the pain returned. A blister was then applied to the affected
part.

part. Upon washing his feet with cold water, he perceived the pain strike to his loins, in which place he continued constantly to feel it to the day of his admission. A weakness commenced in his limbs about three years after the date of the accident, for which he took various remedies, without effect: this weakness terminated at length in the intire loss of the use of his lower extremities. He went to Bath; and after a stay of several months, returned, without having received any benefit whatever from the waters.

Suspecting the cause of his complaint, from his history and apparent symptoms, I examined the spine previously to his admission, and discovered a protuberance of the fourth or fifth dorsal vertebra, which, before that period, had not been noticed, either by himself or those who had attended him. He had now been troubled with a cough for many months: his stools
were

were involuntary, his bladder was not emptied without great exertions; his legs were frequently drawn upwards with violence, at other times agitated with convulsive tremors: he invariably conceived the cause of his disorder to be seated in the loins.

It was somewhat singular in this man's case, that whenever his legs were violently affected with the spasms, he also felt an hysterical sensation in his throat, a lump seeming to have arisen there which impeded deglutition.

The caustics were immediately applied upon each side of the protuberant vertebra. He lay in bed with wonderful patience for eighteen weeks, without perceiving the minutest alteration in the symptoms of his complaint, Mr. Pott, who paid remarkable attention to his case, repeatedly encouraging him to persevere.

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At length, upon one of my visits to him, he informed me, with strong expressions of joy, that on that day, for the first time, he found himself able to move one of his toes. This unexpected alteration in his symptoms was followed by others equally pleasing, until, in the course of about eight months, he intirely recovered; the difficulty of expelling his urine was the last symptom that disappeared.

C A S E VI.

M. B. a woman, aged forty-seven, was admitted into St. Bartholomew's Hospital, in February, 1779.

She related, that her complaints originated from a strain, received in consequence of an extraordinary exertion of strength, about four months before the date

date of her admission. A violent flooding was the immediate effect. To this succeeded a loss of the use of the lower extremities, and a protuberance in the spine. She laboured also under disorders of the stomach and bowels, apparently independent of that, which had produced the curvature, and paralytic affections. For this reason, as well as from some doubts I entertained, respecting the assigned date of the derangement in her spine, I have omitted the further mention of particular symptoms. I have selected the case, however, as deserving of attention, on account of some singularities in the appearances after death.

The caustics were applied, but produced no alteration in her symptoms. She gradually sunk under her complicated complaints.

Upon opening the abdomen, we discovered many conglobate glands, in the vicinity of

of the pancreas considerably enlarged, and of a similar consistency to what is observed in scrofulous subjects. Scrofulous tubercles were apparent also on the surface of the liver, to which viscus there was a very large scirrhus appendage, that descended as low as the crista of the os ilium.

Upon inspection of the spine, we discovered that a gristly substance of the size and shape of a turkey's egg, and of superior firmness to most scirrhi, formed the protuberance observed before death. It occupied the places of the spinous, articular, and transverse processes of three vertebræ of the back, which processes, from some remains in a corroded state, appeared to have been gradually destroyed by the enlargement of the scirrhus: the spongy bodies of these vertebræ alone escaped. This scirrhus mass lay in contact with the spinal marrow. The capitula of two

or three of the ribs on each side were also much corroded. In such circumstances, it will not appear surprising that the caustics should have failed in producing their customary effects.

C A S E VII.

J. D. was admitted into St. Bartholomew's Hospital in February, 1779.

He appeared to suffer much from a scalding of his water, which incessantly dribbled from him. He complained also of great languor and debility, particularly in his knees and back, and numbness in his feet; a white mucous sediment appeared in his urine: an obstinate costiveness, with frequent tenesmus, shortness of breath, a cough, loss of appetite, and want of rest, accompanied these complaints.

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He related, that his disorder originated from a strain which he received from carrying an heavy load, about seven years before the time of his application for relief. Upon examination of the spine, one of the lumbar vertebræ appeared considerably protuberant; upon further enquiry, two fistulous orifices were discovered; one in the thigh, the other in the groin of the opposite side, from which pus was almost constantly discharged. From the depth and direction of these fistulæ, and the patient's history of his disorder, no doubt was entertained of the source of this discharge being seated in the loins.

The caustics were applied, but he died in a few days, perfectly exhausted, before any advantage could possibly have been derived from their use.

An opportunity was not indulged of inspecting the parts.

From reflecting upon this case, and some others I have met with of a similar nature, I have been led to conclude, that, in these instances of the distempered spine, where a protuberance, evidencing a mechanical derangement of the parts, is connected with the paralysis of the lower extremities, the purulent matter, generated while the caries is advancing, is prevented from escaping downwards by the thick ligamentous substance that covers the corpora vertebrarum, and that this fluid thus detained assists in the further corrosion of those parts. Hence the subsequent inflection of the spine, and the protuberance accounted for in so satisfactory a manner by Mr. Pott. In other cases it may be supposed, that the matter formed by ulceration, either originated on the outside of the ligamentous covering of the spine, or else bursts from its confinement within that aponeurotic expansion, and making its way in the course of the psoæ muscles,

muscles, produces that peculiar form of the disorder, to which the name of lumbar abscess is assigned.

Upon mentioning this idea, about two years ago, to a surgeon of eminence in this town, he shewed me the vertebræ of a person who had been cured of a lumbar abscess, and afterwards died of a different complaint. Two or three of the anterior processes of the lumbar vertebræ had evidently been carious; but an ankylosis had taken place, laminæ of the ossific matter uniting the vertebræ, and consolidating them into an inflexible mass*.

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* Mr. Sheldon, Surgeon, deservedly celebrated for his anatomical abilities, favoured me with the sight of the vertebræ of a man, who had laboured under two lumbar abscesses at the same time. The bodies of the third and fourth vertebræ of the loins, the spinous processes of which had been very protuberant in the living subject, were nearly destroyed by ulceration, and the nerves, issuing through the foramina of the spine, in part obliterated by the ravages of the disease.

With respect to the treatment of lumbar abscesses, it may perhaps be impossible to point out any mode of treatment whatever which shall prove successful. It may not, however, be improper to observe, that if the abscess be opened with a knife, the quantity of surface exposed to the air induces that degree of hectic fever, under which the patient generally sinks; Nature, according to the just conception of Mr. Hunter, being exhausted by her exertions in attempting a cure of what it transcends her power to effect.

In such circumstances, would it not be reasonable to open an outlet for the collected fluid, as soon as the fluctuating tumour in the groin, and other symptoms, shall ascertain the nature of the complaint, by means of a caustic applied to the most depending part; and at the same time to form large issues on each side of the spinous processes of the first or second vertebra of the

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the loins? Thus might the matter already collected be gradually evacuated, without hazard of the mischief generally attendant upon the exposure of a large internal surface to the free admission of the air, and at the same time the cure of the injured vertebræ be promoted by the establishment of a new irritation, or drain, in the vicinity of the original disease.

I am inclined to believe that many cases occur not unlike to what I have just described, and others of a nature apparently dissimilar, in which the timely application of the caustics would prevent the melancholy train of evils, attributed frequently, in the first stage, to other causes, but in fact derived from a distempered spine. A careful attention to symptoms and dissections may perhaps hereafter afford us the means of detecting the latent mischief in its first access, and thus enable us to prescribe a rational and effectual mode of cure.

C A S E VIII.

T. R. was admitted into St. Bartholomew's Hospital in October, 1778.

He complained of a weakness in his lower extremities, for which, during a course of ten weeks, a great variety of nervous medicines was prescribed, without effect. No derangement during this period was suspected in his spine.

The disorder now rapidly advancing, his case was more accurately inquired into; a considerable degree of protuberance was discovered in three of the dorsal vertebræ, and the caustics were applied. At this time the use of the lower extremities was intirely lost; the disorder had proceeded to its final stage. He died within

within three weeks after the nature of his disorder was ascertained, and before it was possible for the caustics to have produced any sensible effect.

In his narrative he declared, that he did not recollect any strain or probable cause of his disorder. The first symptom was a numbness, which suddenly seized his left instep, affecting him with the sensation of an heavy body striking that part: a weakness followed in both his knees; a rigidity of the lower extremities ensued, with a total insensibility of those parts. He complained also of a sharp pain in the right side of the thorax, proceeding from the affected vertebræ. He never lost the power of excreting his urine or his stools.

The following account of the appearances, after death is drawn up, partly from my own papers, partly from the papers

of a gentleman of great medical abilities, who attended the dissection*.

The body being placed with the face downwards, a rectangular portion of the spine, containing six or seven vertebræ, with the three that were protuberant in the middle, were removed by the saw. Immediately under them was lodged about half a pint of foetid discoloured fluid, contained in a pouch, and in contact with the bodies of the vertebræ, which was prevented from entering into the cavity of the thorax by the aponeurotic expansion covering the spine. The bodies of two of the vertebræ were separated from the other processes of those vertebræ, and, together with the intervening cartilages, were almost intirely dissolved into a liquid cretaceous substance. The vertebræ immediately contiguous had received but little injury, although their bodies were exposed to the fluid

* Dr. Beerenbroek.

fluid contained in the pouch: the aponeurotic expansion confining the fluid was much thickened; its colour almost black.

The medulla spinalis appeared perfectly sound. The dura mater, where it lay exposed to the matter, was also black, but not eroded, except that a small aperture, as if made with a lancet, was discerned on one side, through which it was supposed the fluid of the abscess had penetrated, so as to press upon the spinal marrow itself. A portion of two or three of the dorsal nerves on one side, in the place where they issue between the vertebrae, was totally destroyed. The capitula of the corresponding ribs were also exposed and considerably eroded.

C A S E IX.

In the beginning of the year 1779, I attended a boy about seven years of age, who laboured under the symptoms of obstruction in the mesenteric glands. His belly was prominent and hard, his stools were slimy, and he was much reduced in consequence of an hectic fever, attended with cough, loss of appetite, and restlessness. His manner of walking was awkward and irregular; and he frequently complained of pain in the thigh of the right side, and a violent itching in the groin.

Upon surveying the spine, I observed that species of inflexion to which nosologists give the name of scoliosis, and upon a second examination, some weeks afterwards, a slight degree of protuberance

at the tenth or eleventh dorsal vertebra began to disclose itself,

I had tried some of the ordinary remedies prescribed in scrofulous cases, before the protuberance was discerned, without much success. Upon the discovery of this appearance, I earnestly recommended the application of the caustics, according to Mr. Pott's directions, but my remonstrances were in vain. At the end of eighteen months, I saw this child bent almost double, the use of the lower extremities utterly lost, and with all the symptoms of approaching dissolution, which took place in the course of a few days.

I am much inclined to believe that this child might have been saved by an application of the caustics, immediately upon the discovery of the protuberance in the spine.

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Since the time of my attendance upon the preceding case, I have very frequently seen children, nearly of the same age, labouring under similar complaints, which I have reason to presume were derived from the same source. In some, the lumbar vertebræ were evidently protuberant; in others, a small degree of protuberance might be observed in the lower vertebrae of the back, attended with pain upon the slightest touch. In all these cases there was a considerable prominence of the belly, and other signs of obstruction in the glandular system. Is it not therefore reasonable to suppose, that one of the conglobate glands, of which many are found in the vicinity of the lumbar vertebræ, may frequently be the original seat of the disease, and that from thence the ulceration is extended to the vertebræ themselves?

In other cases there is ground for suspicion that the bodies of the vertebræ, or the intervertebral

tervertebral substance, are primarily affected, the same scrofulous disposition inducing this distemper, which is known to frequently to affect the acetabulum of the thigh, the joints of the elbow, and the knee, with the corresponding ligaments; disorders to which the name of white swelling is commonly assigned.

When this disorder affects the eyes, or such of the conglobate glands as evidence themselves to the touch, the nature of the complaint is quickly perceived, and issues are ordered with singular advantage. With equal propriety surely may similar drains be recommended in the neighbourhood of the diseased parts, when the joints are affected, whether they be the joints of the extremities or the articulations of the spine.

The paralysis of the lower extremities, with a debility in the functions of the bladder and the rectum, which take place
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when the spine is the seat of scrofula, are the mere effects of the disorder, occupying the vicinity of large portions of that substance, which is the proper seat of sensibility and voluntary power; and therefore ought by no means to enter into the definition of the disease. Not only an erroneous description of a disorder, but even the assigning of an improper name to a complaint, as Mr. Pott has repeatedly observed, leads to an improper treatment of that disorder; and thus the art of medicine often perpetuates the evils, which it is its object to remove. In consequence of such misconception, I have frequently seen the whole class of nervous medicines employed, and the Bath waters prescribed, to relieve the paralysis of the lower extremities, when, after the cause of the disorder was detected, it was obvious that they must necessarily have aggravated the disease; and I am very much inclined to believe that many other disorders, reputed nervous, are

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the effects of complaints merely local, and are frequently derived from some affections of the viscera of the abdomen, for which medicines of a very different operation should be prescribed.

C A S E X.

In the course of the last year I was desired to visit a person who laboured under an obstinate costiveness, and a complaint in his bladder. Upon my arrival at his house, I found that he had had no evacuation by stool for the last fortnight, and that for six months past, his urine, which abounded with a yellow sediment of a purulent appearance, came involuntarily from him, and without his perception. He complained much of spasms, and of pains affecting his calves, his ancles, the soles and the great toes of his feet, which were very excruciating when he sat up in bed. He felt

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the operation of medicines in the upper part of his bowels, in the lower numbness prevailed. It was with difficulty that he retained either food or medicine on his stomach; his pulse was languid, and his whole appearance evidenced him to be on the verge of dissolution, which in a few days afterwards took place.

Upon enquiry into his history and preceding symptoms, he informed me, that fourteen years ago he had received a bruise from being pressed between two carriages, which had caused a vomiting of blood. That for three or four years past, he had felt painful sensations in his loins, from which period he dated the commencement of the disorder in his bladder.

On account of the pains in his feet, his complaints were treated as proceeding from rheumatism or the gout, and Bath waters were

were prescribed, but no advantage was derived from their use.

About a month before I saw him, a slight degree of fullness was observed in the region of the os sacrum; but it was never suspected that the original cause of his disorder was seated in that part.

Under a full persuasion, that some concealed mischief in the neighbourhood of the os sacrum was the source of his complaints, after having procured an evacuation by the help of castor oil, I directed caustics to be applied to the protuberant part; but he died before any separation of the sloughs had taken place.

Upon examination of the body after death, the colon, from its commencement to the beginning of the rectum, appeared considerably enlarged, and much distended with fæces; the bladder also was greatly

enlarged, its muscular coat preternaturally thickened, and its inner surface fasciculated; but no ulcer, erosion, or any other injury whatever, was discerned.

Upon examination of the os sacrum, an uncommon derangement presented itself to the sight, exhibiting the immediate source of the patient's complicated complaints; the posterior surface of that bone was separated intirely by caries from the anterior: the distemper had also penetrated deep in its substance, having nearly obliterated those proecesses of the spinal marrow, which form the ischiatic nerve, and greatly injured the spinal marrow itself.

Upon an accurate survey, every other part of the spine, and all the viscera, both of the thorax and abdomen, appeared perfectly sound.

Although

Although it was the main object and design of this publication, to illustrate and confirm, as far as my feeble powers would admit, the doctrine of that able practitioner, who has deserved so much of his country and mankind; yet, in the selection of the preceding cases, and the enumeration of the symptoms, attendant upon the various stages of this calamitous disorder, it was also my design to afford materials, for an early investigation of the frequently concealed source of complaints, differenced from each other in their outward form, in origin substantially the same. I have a similar end in view in the remaining pages of this tract, in which I shall with fidelity report such other particulars, as seem worthy of attention, selected from a great variety of cases, which fell within my immediate observation; the narrative first in order forming the only exception to this rule.

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The history, of which the following is an abstract, was communicated to me with such circumstances of credibility, as would not permit me to doubt of the accuracy of the report.

C A S E XI.

A boy, about twelve years of age, received a blow from a stone, which struck his loins. In the evening of the same day he was seized with a shivering, which lasted about five minutes; a fever succeeded, which ran high during the night, but abated towards the morning. At the same period of time a contraction of his legs took place, attended with great debility of his lower extremities. He complained of pains all over him, but more particularly in his stomach and the small of his back.

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As the accident, which gave occasion to these symptoms, was not known to the friends of the patient, the disorder was treated as a feverish complaint. It sometimes remitted, at other times a perfect intermission of the feverish symptoms took place. The power of moving his limbs was daily diminished, until, at the close of ten days from the time of the accident, he was utterly incapable of lifting them from the ground. At this period no swelling was perceptible on his back.

In about a month after the time of receiving the injury, his situation was truly deplorable: his appetite was lost, his pulse was quick and feeble: he was affected with a cough and purging, and the facies Hippocratica was evident to an extreme degree.

At this time a lump was discovered, about the size of a large egg, not much inflamed nor very painful, which comprehended the
second

second and third vertebrae of the loins, not unlike beginning abscess.

A large incision was made into the tumour, and two beans inserted: a kindly suppuration took place on the third day, and at the end of a week he was considerably better: his countenance was more enlivened, his pulse improved, and the power of moving his limbs in part regained.

The issue discharging freely, the swelling gradually abated, and in the space of a month intirely disappeared.

The issues were dried up sooner than the gentleman who attended had directed. At the end of three months he was able to walk a considerable distance with little inconvenience, but every material change of weather very sensibly affected him.

Few

Few instances, hitherto observed, more strongly point out the operation and advantage of the issues.

C A S E XII.

A labouring man for a length of time had been afflicted with the ordinary symptoms, attendant upon an evidently distempered spine. He was admitted into St. Bartholomew's Hospital, and the caustics were applied according to the prescribed mode. At the end of a few months he so far recovered, that he left the hospital, and returned to his work. The disorder returning, in consequence of too early an application to his employment, he a second time petitioned for assistance: the caustics were a second time directed; but being applied by a person, not under the immediate inspection of Mr. Pott, about three inches below the protuberance, they pro-

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duced

duced no effect, though continued for many weeks. At length, upon the remonstrance of a gentleman better acquainted with Mr. Pott's mode of treatment, they were renewed in the former place. The effect was quickly visible. At the conclusion of two months the patient was discharged in perfect health.

C A S E XIII.

A girl was admitted into St. Bartholomew's Hospital, afflicted with the disorder, termed St. Vitus's dance. Some of the vertebræ of the neck were very protuberant. The caustics were applied, and, from the effects produced by their use, it was evident the convulsive symptoms were derived from a distempered spine. At the close of a shorter period than is usual in these cases, she left the hospital, free from her complaint.

CASE

C A S E XIV.

I lately attended a lady, of a very delicate frame, who was frequently affected with pains in the stomach, nausea, soreness of the sternum, languors, hysteric risings, numbnesses, and cramps in the legs and feet. Her complaints, for the course of several years, were attributed to the gout; at length a protuberance was discovered in the spine: upon further enquiry it appeared, that this protuberance had subsisted for some years. She complained also of weakness in her ancles, want of feeling in her hands, and sensations as if one side was upon the point of becoming paralytic, and a constant pain in the small of her back; the protuberant spinous processes of the affected vertebræ were tender to the touch. I advised the application of the caustics, but my

remonstrances, as has happened not unfrequently in similar circumstances, have hitherto been urged in vain.

In the course of my attendance at St. Bartholomew's Hospital, and also in my private practice, I have not unfrequently met with complaints, arising from a great variety of assigned causes, which bore a strong analogy to some of the preceding cases. In several patients, of a delicate habit of body, who in early life had experienced scrofulous complaints, I have observed the joints of the knees to be feeble, swoln, and painful; the articulations also of the spine were similarly affected, many of them evidencing great sensibility upon the gentlest touch, and in a slight degree protuberant. Palpitations of the heart, incontinence of urine, general debility, and irregular pains in the legs and feet, have accompanied these symptoms. In other instances, these pains have been termed

rheu-

rheumatic, by the patients or their friends, and have been attributed to the effects of cold. I have often had reason to believe, that these complaints were the consequences of venereal indulgence, and that they sometimes terminate in a paralysis of the lower extremities and a carious spine.

In two or three instances I have observed, that the termination of fever has been attended with circumstances, that seemed to indicate an inflammation and consequent abscess, either in the spine itself or its vicinity; but this I offer merely as matter of conjecture, not having sufficient authority, either from dissections or the effect of caustics, to assert the fact.

When I first attended to this subject, I was inclined to believe that those parts alone, whose nerves are derived from the spinal marrow, below the injured vertebra, or from its immediate vicinity, were affected
with

with numbness, pain, paralysis, or spasm; but many cases have lately been observed in the hospital I attend, and others I have seen in private practice, in which the upper extremities have been affected, although the disorder occupied parts of the spine, considerably beneath the origins of the axillary plexus. I conceive it would not be a matter of difficulty to explain this fact, as well as many others of a similar kind, from the doctrine lately advanced by the ingenious SCARPA, respecting the nature and use of the ganglions of the nerves, and the consequent prevalence of sympathy in the nervous system; but it would be a departure from my purpose to introduce theoretical disquisitions into an essay merely practical. Whether the following case can be urged as an evidence of the fact, I will not positively determine; the detail of it, however, may perhaps answer some purposes of no less importance.

CASE

C A S E XV.

R. I. aged twenty-four years, was admitted into St. Bartholomew's Hospital in May, 1781.

Every attention possible was afforded to his case by the physician. The following remedies were prescribed: Mithridat. cum spir. Minder. pil. aromatic—rad. val. sylv. p. femin. sinap. $\overline{a}$ dr. j. cum decoct. cort.—baln. frigid.—julep. volat.—ol. e pedibus bovin.—tinct. guaiac. volat. ter die—infus. lenit. pro re natâ—haust. oleos. cum mannâ—enema Terebinth.—ol. ricini, sextis horis.

At the close of six weeks from the date of his admission, upon the recommendation of the attending physician, he was examined
by

by Mr. Pott. The tenth vertebra of the back was found considerably protuberant.

The following is an abstract of his symptoms at this period:

He lay constantly on his back, unable to turn himself in bed, and almost intirely deprived of the use of all his limbs. His legs, six or seven times in an hour, were drawn upwards with convulsive twitchings, his great toes and fingers being also agitated with spasms. His head at the same time was drawn violently backward; all these convulsive motions were attended with considerable anxiety. Numbness prevailed in his loins, his knees, and feet. The sense of feeling and powers of motion were destroyed in almost every part of his frame: his abdomen was swoln and hard: an obstinate costiveness and difficulty of making water were superadded to these sufferings; a violent

lent pain was felt in the protuberant vertebra, when he was under the influence of the spasms.

It appeared from his history, that he had been affected with the lues, and for some years past had been very much devoted to venereal indulgences.

The first symptom that alarmed him, was a stiffness in his neck, which came upon him suddenly in the night, about three months before the time of his admission. At the end of two months from the first seizure, his right leg began to be affected. The cold-bath was prescribed at this period, which aggravated his complaints. He gradually grew worse, till a general coldness prevailed through the whole system, and every part of his frame was affected with paralysis or spasm.

The application of the caustics was attended with very little advantage: through a defect of the vital power, they occasioned no pain; and it was with difficulty nature effected a separation of the sloughs: his distressing symptoms continued till his death, which took place in about two months after the nature of his complaint was ascertained.

In two or three instances I have observed the upper cervical vertebræ affected. In one of these a collection of matter was found in the vicinity of the second vertebra, commonly termed dentata. The unhappy sufferer, upon every motion of his head, felt a pain descend in the course of the spinal marrow, with general numbness, and sometimes pricking pains at the extremities of his toes and fingers.

I am sensible that the credit of a remedy

medy frequently successful, is often impaired by its injudicious or too extensive application, yet, seeing every reason to conclude with Mr. Pott, that the advantage gained from the caustics is in a great measure owing to the new irritation, or discharge, occasioned by them in the vicinity of the affected part, I cannot omit this opportunity of recommending their use in many idiopathic affections of the head.

Issues in the neck have frequently been advised, in cases of apoplexy and palsy, by physicians and surgeons of the greatest name. It is to be wished that the effects of caustics in removing the distressing symptoms, attendant upon a distempered spine, may lead practitioners to a more general application of this remedy, when the primary source of sensation and motion is the seat of the complaint.

I am persuaded, that if all the cases of a distempered spine, which have occurred during the last five years at St. Bartholomew's Hospital, were faithfully and circumstantially reported, great advantage would be derived to medical knowledge, and the mode of treatment, recommended by Mr. Pott, be still more evidently demonstrated. The interests of truth have nothing to apprehend from the keenness of investigation, and the utmost severity of human judgment. I should therefore wish to see the doctrine, advanced by that accomplished practitioner, further discussed, convinced, that its harmony with truth and reason would be established by an appeal to fact: the hospitals of this metropolis and kingdom would afford too many opportunities of ascertaining this point.

I am sensible that the preceding details are in many respects imperfect: from an
hope

Hope, however, that they may not be altogether unuseful, they are with deference submitted to the indulgent candour of the public.

It remains that I subjoin the result of my own experience and observation on this subject.

The general conclusions, suggested by the preceding cases, and above twice the number of others, to which I have afforded a distinct attention, are as follows :

1. That the caustics, which were indiscriminately applied in every stage of the disease, were the efficient means of cure in a majority of the cases, and that they generally succeeded, when the case could with propriety be termed a fair one.

2. That in the remainder, with one or
two

two exceptions, they produced an evident effect in restoring sensibility and some degree of motion.

3. That in the unsuccessful cases, the patients died exhausted by hectic fever, and the genuine effects of the distemper, and did not appear to be prejudiced, in the remotest degree, by the application of the caustics.

APPENDIX

A P P E N D I X.

CASE OF CATALEPSY.

ALTHOUGH the subjoined history has no connexion with the preceding cases, I trust the perusal of it will not be unpleasing to my readers, as it relates to a disorder of unfrequent occurrence in ordinary practice:

In the latter end of the last year, I was desired to visit a young lady, who for nine months

months had been afflicted with that singular disorder termed a catalepsy. Although she was prepared for my visit, she was seized with the disorder as soon as my arrival was announced. She was employed in netting, and was passing the needle through the mesh; in which position she immediately became rigid, exhibiting, in a very pleasing form, a figure of death-like sleep, beyond the power of art to imitate, or the imagination to conceive. Her forehead was serene, her features perfectly composed. The paleness of her colour, her breathing at a distance being also scarce perceptible, operated in rendering the similitude to marble more exact and striking. The position of her fingers, hands, and arms, was altered with difficulty; but they preserved every form of flexure they acquired; nor were the muscles of the neck exempted from this law; her head maintaining every situation, in which the hand could place it, as firmly as her limbs.

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Upon gently raising the eyelids, they immediately closed, with a degree of spasm. The iris contracted upon the approach of a candle, as in a state of vigilance; the eyeball itself was slightly agitated with a tremulous motion, not discernible when the eyelid had descended.

About half an hour after my arrival, the rigidity in her limbs and statue-like appearance being yet unaltered, she sung three plaintive songs, in a tone of voice so elegantly expressive, and with such affecting modulation, as evidently pointed out, how much the most powerful passion of the mind was concerned in the production of her disorder, as indeed her history confirmed. In a few minutes afterwards she sighed deeply, and the spasm in her limbs was immediately relaxed. She complained that she could not open her eyes, her hands grew cold, a general tremor followed; but, in a few seconds recovering intirely her re-

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collection and powers of motion, she entered into a detail of her symptoms, and the history of her complaints.

She informed me, that she had no recollection whatever of what passed in the fits; that upon coming out of them she felt fatigue, in proportion to the time of their continuance; and that they sometimes lasted for five hours, though generally for a much shorter period.

She further related, that the fits returned once or twice a day, sometimes more frequently; but that she was never troubled with them in the night. She sometimes lost her sight and speech, the power over her limbs, and her intellectual faculties remaining unimpaired. The fits frequently attacked her without any previous warning; at other times, a fluttering at her stomach, and a fixed pain at the top of her head, occupying

occupying a part which she could cover with a finger, announced their approach.

Hysterical risings in her throat, appearances of fire, pains in her eyes, and not unfrequently in her teeth, flatulence, a sense of weight in her stomach after eating, with convulsive motions in the region of that organ, were superadded symptoms, of which she much complained.

Her disorder was evidently exasperated at the approach of the catamenia, which were constantly present at the regular period. She was always much agitated previously to a storm of thunder; and every material alteration of the weather produced a sensible effect.

After she had discoursed for some time with apparent calmness, the universal spasm suddenly returned. Her features now assumed a different form, denoting a mind strongly

impressed with anxiety and apprehension. At times she uttered short and vehement exclamations, in a piercing tone of voice, expressive of the passions that agitated her mind; her hands being strongly locked in each other, and all her muscles, those subservient to speech excepted, being affected with the same rigidity as before.

During the time of my attendance, similar appearances were frequently exhibited.

I was informed by the family of many particularities in the access of the disorder, all denoting its instantaneous effect upon the nervous system. She once was seized in my presence while drinking tea, and became universally rigid, at the instant she was advancing the tea-cup to her mouth. Her tears sometimes flowed copiously, while every internal as well as external sense seemed intirely locked up in sleep.

I will

I will now proceed to describe the progress of the disorder, and the mode of treatment, before she was intrusted to my care.

It appears, that for many years before the access of the cataleptical symptoms, she had suffered much from violent headaches, particularly that species of head-ach, termed *clavus hystericus*. Her spirits were easily discomposed. Her fingers, upon touching cold substances, would frequently lose their natural heat and feeling. Her habit of body had been uncommonly costive, but of late her bowels were much disturbed by every kind of laxative. Her nervous complaints were always particularly troublesome at the approach of rain, and after a sleepless night.

Her disorder commenced with hysteric fits; to these succeeded a delirium of several days continuance, attended with slight shiverings, but no other sign of fever: the
catalepsy

cataplexy followed next in order, which at first affected her with only single fits, at a week or fortnight's interval; these gradually advanced in strength and frequency, until, by her own sufferings, and her sensibility, on account of the anxiety of her friends, she was reduced to the most pitiable distress.

Before I saw her she had been under the care of a physician of eminence in the country, who had attended to her case with singular humanity, and had prescribed various medicines of the nervous kind, which at one time produced so favourable an effect, as even to flatter with the prospect of a cure; but the symptoms returning with increased violence, through fresh anxiety of mind, the same course of medicine was not attended with the same success.

Musk, opium, and bark, the latter of which did not always agree with her bowels, were found most effective. Of musk she had

had taken to the amount of a drachm and a half each day. Its use removed a sense of chillness, of which she before had much complained. A few drops of laudanum at the hour of rest had also been attended with advantage.

After I had tried æther—liquor anodyn. mineral. Hoffm.—ol. essent. e flor. chamæm.—ol. succini—extract. cicut.—rubig. chalyb. ppt.—sal succini—julep e camphorâ, and opium in a great variety of forms, without much advance, I found the following application had an evident good effect:

R. Opli colati

Camphoræ $\overline{a}$ a drach. i.

Emplastr. stomach. q. s. f. emplastr. regioni ventriculi admo-
vendum.

Observing the effect of this application, and reflecting upon the many tokens of debility

debility which her stomach exhibited, I directed my attention to the strengthening of that organ, and, notwithstanding the discouraging circumstances that had formerly attended the exhibition of the bark, determined to make another trial of its power.

I chose the following form of preparation, which Dr. Whytt had found to be particularly serviceable in hysterical complaints :

R. Cort. Peruv. p. uncias duas,

Rad. gentian.

Cort. aurantior. $\overline{aa}$ drachmas sex,

misce: infunde in spir. vinos.

Gallic. lb. ii. in balneo arenæ;

per dies sex & cola.

Finding upon trial that half an ounce of this tincture, the quantity directed by Dr. Whytt, though diluted with two ounces of

of water, was more than her stomach would bear, I prescribed as follows:

R. Aquæ puræ unciam unam cum
semisse,

Tinct. præscript. drachmas duas,

Spir. lavend. c. drachmam unam,

M. f. haust. bis die sumendus.

Instead of the common kinds of tea, I advised her to drink an infusion of the outward rind of lemon, which appeared particularly grateful to her taste and stomach.

She declared that she felt immediate benefit from this prescription.

She took some drops of Hoffman's anodyne liquor, or of laudanum, as occasion appeared to require.

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She persisted in this course with evident advantage. Her fits grew less frequent, returning faintly after a week or fortnight's interval; her spirits were improved, her strength increased, until at length, without the use of any other medicine, she became intirely free from all complaint.

THE END.

